



Inline leak testing of colourful PET bottles

Detecting pre-defects

Allvig says that it provides its customers with advanced and sophisticated optical control systems for inline quality assurance in manufacturing.

Allvig has many years' experience in quality assurance. Its systems for inspecting transparent lenses, shrink-sleeves in the shape of plastic cups, PET bottles and caps now include artificial intelligence capabilities that operate in ways similar to human cognition. The company says that its combination of "innovative optical technology and tried-and-tested proprietary software" enables it to deliver reliable systems tailored to customers' specific needs.

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Its recent "Inline leak test of colourful PET bottles" project, which was designed to facilitate production process optimisation, incorporated the company's 'double level inspection' quality control strategy. The first step covers inspection and rejection of defective parts; the second is preventive investigation: one of Allvig's strengths is the detection of low-contrast and intricate defects by finding them at the beginning phase of the production process, tracking down and detecting defects before they arise. The system searches for areas or tiny spots that indicate anomalies, even before dents or scratches become visible. When such a pre-defect is detected, the operator receives an alert and can calibrate the production machine to prevent the accumulation of additional defects. This strategy helps to reduce waste and save production costs.

Allvig says that its systems, equipped with proprietary optical inspection technology, help manufacturers overcome one of their biggest contemporary challenges: reliable defect detection while minimising pseudo-rejections. This helps to reduce waste to a minimum which benefits the environment and also results in substantial production cost savings.

Allvig systems can be integrated in any existing production machine, on conveyer belts or into handling and robot systems. Bespoke modifications available range from process speed and product size to specific contrast detection. Statistical data are automatically logged during processing to establish traceability. The user interface is claimed to be easy to use and available in customer languages. The company's turnkey solution includes a personal access service, with 24/7 technical support.

www.allvig.com

